ENVIRONMENTAL PROTECTION DIVISION

DEPARTMENT OF NATURAL RESOURCES

STATE OF GEORGIA

IN RE: GENERAL ELECTRIC COMPANY, Rome, Floyd County, Georgia § ORDER NO. EPD-WQ-370

CONSENT ORDER

WHEREAS, the General Electric Company (hereinafter the "Company") presently owns and operates a plant for the manufacture of electrical transformers in Rome, Floyd County, Georgia; and

WHEREAS, on March 7, 1977 the Director of the Georgia Environmental Protection Division (hereinafter the "Director") executed National Pollutant Discharge Elimination System Permit No. GA 0024155 (hereinafter the "Permit"), which Permit authorizes the Company to discharge pollutants into the waters of the State, subject to various effluent limitations from its Rome, Georgia property; and

WHEREAS, the Permit was issued to the Company under cover of letter dated March 10, 1977 from the Director to Mr. Richard L. Reinhart, Manager-Relations and Utilities Operation, Large Transformer Division, with copies to Mr. H. E. Frost, Manager-Manufacturing, Medium Transformer Department, Rome, Georgia, and Mr. Richard Lester, Plant Engineer, Rome, Georgia; and

WHEREAS, by letter dated April 13, 1977 to the Director (hereinafter the "Petition"), Mr. Reinhart, objected to various provisions of the Permit as same relate to limitations on the discharge of polychlorinated biphenyl compounds (hereinafter "PCBs") and petitioned on behalf of the Company for a hearing pursuant to Section 17(a) of the Executive Reorganization Act of 1972, as amended, and Section 12 of the Georgia Water Quality Control Act, as amended; and

WHEREAS, the Petition was referred to the Hearing Officer for the Board of Natural Resources; and

WHEREAS, Notice of Hearing, dated June 29, 1977, was issued by the Honorable James B. Talley, Hearing Officer, to the Director and the Company requiring each to appear at a hearing on September 5, 1977 in regard to the Petition; and

WHEREAS, on July 15, 1977, the Director filed his Matters Asserted in the above matter with the Hearing Officer, a copy of same being served upon counsel for the Company; and

WHEREAS, the Company filed its Answer to the said Matters Asserted with the Hearing Officer under cover of letter dated August 11, 1977; and

WHEREAS, the Director and the Company desire to resolve the objections to the Permit expressed in the Petition; and

WHEREAS, the Company consents to the following Order in an effort to meet all applicable effluent limitations;

NOW, THEREFORE, the Director hereby Orders and the Company hereby agrees to the following:

1. With regard to the discharge of PCBs from outfall serial numbers 001, 002, 003, 004 and discharge(s) to the City of Rome's sewerage system as designated in the Permit, the Company agrees to comply with the compliance program and compliance schedules set forth in the document entitled "COMPLIANCE FLOW DIAGRAM CHARTS BY OUTFALL" (hereinafter "Report") attached hereto and incorporated herein by reference. Such compliance program is designed to meet the effluent limitations for PCBs established in the Permit as hereinafter modified.

2. For purposes of this Order and for purposes of compliance by the Company with effluent limitations for PCBs by the dates established herein, the following shall apply where applicable:

(a) With regard to the discharge limitations on PCBs for outfall serial numbers 001 and 003, there shall be no discharge of PCBs from the Company's property served by these drains during dry weather conditions. During wet weather and storm runoff conditions, the maximum allowable PCBs limit shall be 10 parts per billion (micrograms/liter) for each such drain.

(b) With regard to the discharge limitations on PCBs for outfall serial number 002, there shall be no discharge of PCBs from the Company's property served by this drain during dry weather conditions. During wet weather and storm runoff conditions, the maximum allowable PCBs limit shall be 10 parts per billion (micrograms/liter).

(c) With regard to the monitoring requirements for discharges from outfall serial numbers 001, 002, and 003, samples shall be collected only if there is a discharge during the measuring frequency established in the Permit.

(d) With regard to the discharge limitations on PCBs for outfall serial number 004, for process discharges, the maximum allowable PCBs limit shall be 1 part per billion (micrograms/liter). For wet weather conditions and storm runoff, the maximum allowable PCBs limit shall be 10 parts per billion (micrograms/liter). The 10 parts per billion concentration limitation is in effect only if the flow is greater than 156,000 gallons per day. Upon a documented showing by the Company that actions have been taken to effectively reduce the dry weather process and cooling water blowdown rate to a consistently lower value, the discharge rate at which the storm runoff limitation becomes effective will be reduced accordingly by order of the Director.

3. For purposes of this Order, the words "discharge(s) to the City of Rome's sewerage system" in the Permit and the words "Discharge Point 005" in the Report, refer to the same discharge. Furthermore, the words "outfall serial number" in the Permit and the words "DISCHARGE POINT" in the Report may be used interchangeably.

4. Any reference to outfall serial numbers 001, 002, 003 and 004 in this Order shall refer to those outfalls so designated in the Permit.

5. For purposes of this Order, the compliance flow charts for sludge disposal contained in the Report refer only to sludges resulting from any treatment facilities installed at the Company's Rome plant. Prior to the time the Company implements a sludge disposal program as described in the Report, the Company shall take whatever measures are necessary to prevent the sludges resulting from any treatment facilities constructed at the Company's Rome plant from contaminating the waters of the State.

6. Should the Company achieve at any outfall or outfalls referred to in this Order, limits that, within the precision of measurement capability, closely approach the limits specified in this Order, and should the Company determine that the cost of implementation of any other control measures set forth in the Order would not be justified based upon a cost-benefit analysis, and should the Director agree with the Company's determination, the Permit shall be revised to reflect the limits so achieved by the Company. Should the Director not agree with the Company's determination, the Company shall be entitled to a hearing on the matter in accordance with Section 17(a) of the Executive Reorganization Act of 1972,as amended, and Section 12 of the Georgia Water Quality Control Act, as amended, and the Company shall not

be required to proceed to implement any further control measures for the applicable outfalls until the issues raised in said hearing have been finally resolved.

This ORDER shall be considered final and effective immediately.

ORDERED, This 7 day of October, 1977.

CONSENTED AND AGREED TO:

GENERAL ELECTRIC COMPANY

BY: Richard L. Reinhart
Richard L. Reinhart
TITLE: Manager-Relations and Utilities Operation, Large Transformer Division
ATTEST:

Edith H. Dibbs (SEAL)
Attesting Secretary

J. Leonard Ledbetter
J. LEONARD LEDBETTER, Director
Environmental Protection Division
Department of Natural Resources
State of Georgia

ROME, GEORGIA PLANT

GENERAL ELECTRIC COMPANY

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COMPLIANCE FLOW DIAGRAM CHARTS

BY OUTFALL

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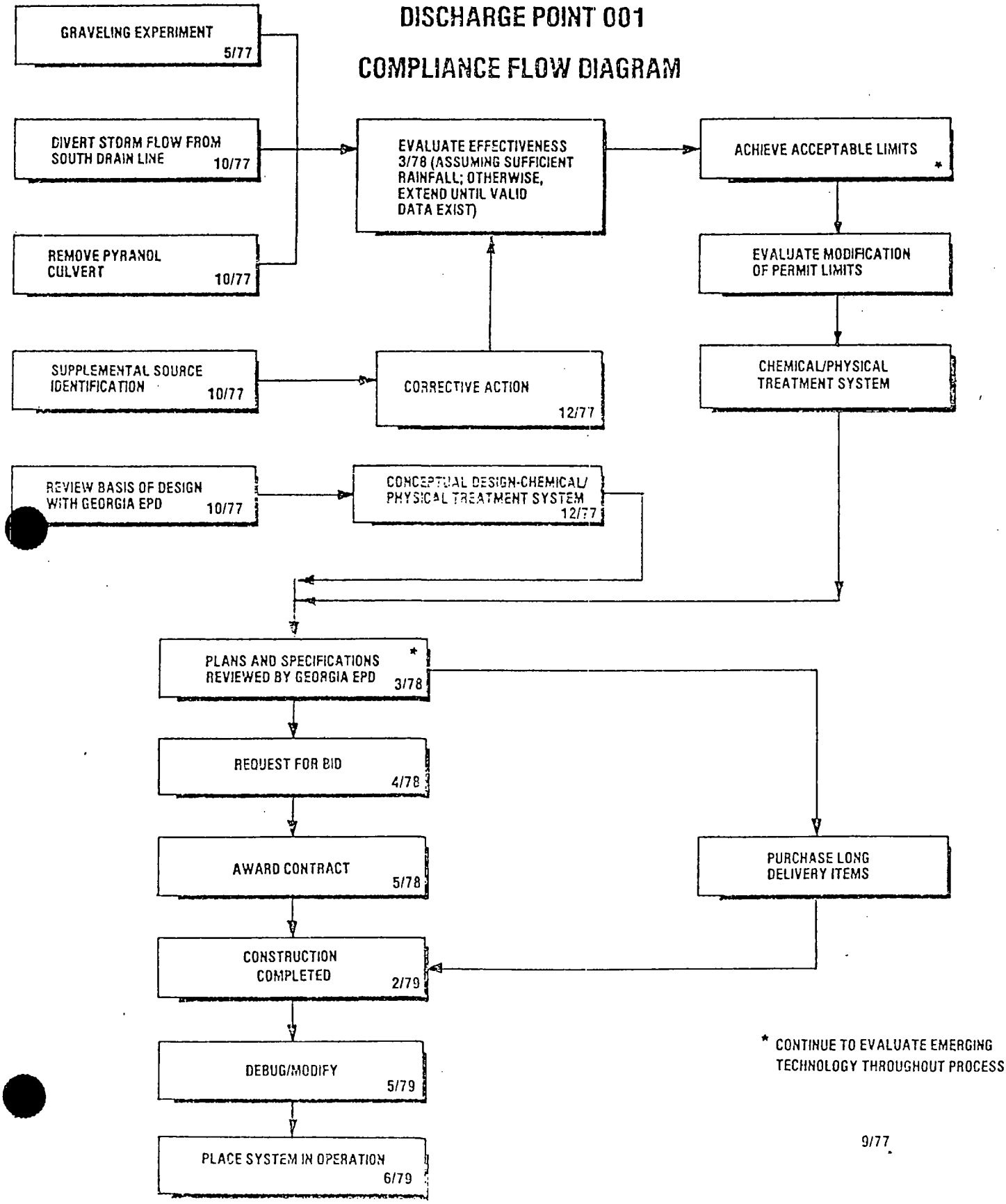
EXHIBIT 1

DISCHARGE POINT 001

COMPLIANCE FLOW DIAGRAM



* CONTINUE TO EVALUATE EMERGING TECHNOLOGY THROUGHOUT PROCESS

9/77

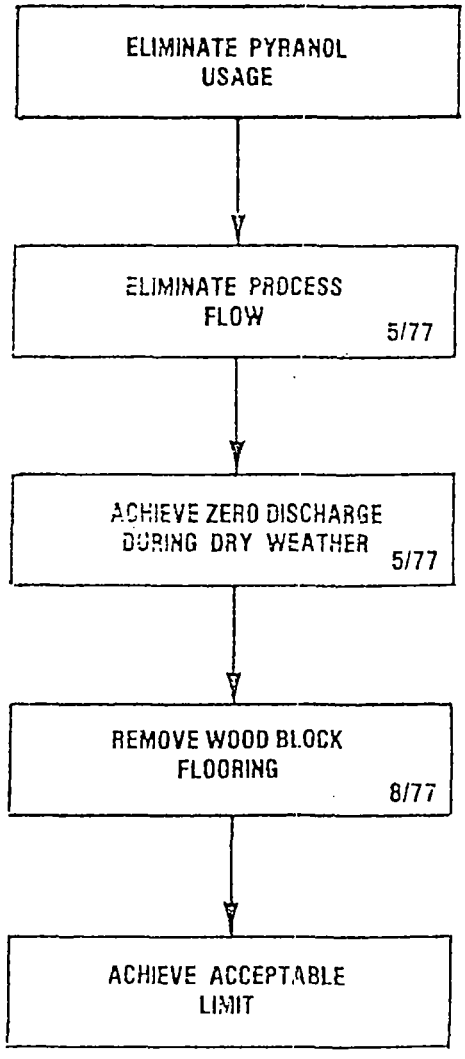
DISCHARGE POINT

001

ITEM DESCRIPTION	DATE
I. Graveling Experiment: 3.2 acres of gravel, consisting of 6" crushed run and 6" graded stone; 8,000 ft.^{2} concrete on grade; terrace and curbs to achieve≤1% slope.	5/77
A. Evaluate effectiveness - as rainfall permits, samples will be collected and analytical results plotted to determine trend.	
• Initial indication of effectiveness	9/77
• Examine trend	12/77
• Complete statistical analysis (assuming adequate rainfall)	3/31/78
B. Supplemental source identification - other minor sources (if present) which were impossible to trace due to contribution from landfill may now be located.	10/77
• Implement required source containment	12/77
C. Remove storm drain pipe east of Oil House and clean valley gutter north of Oil House	10/77
D. Divert storm drainage around present drain on south side of Oil House	10/77
E. Chemical/Physical End-of-Line Treatment System (described in June 1977 Engineering Report) (Hereinafter referred to as Chemical/Physical Treatment System)	
• Review basis of design with Georgia EPD	10/77
• Conceptual design complete	12/77
• Plans and specifications reviewed by Georgia EPD	3/78
• Request for bid	4/78
• Award contract	5/78
• Complete construction	2/79
• Debug and modify	5/79
• Place system in operation	6/79

DISCHARGE POINT 002
COMPLIANCE FLOW DIAGRAM

EXHIBIT 2



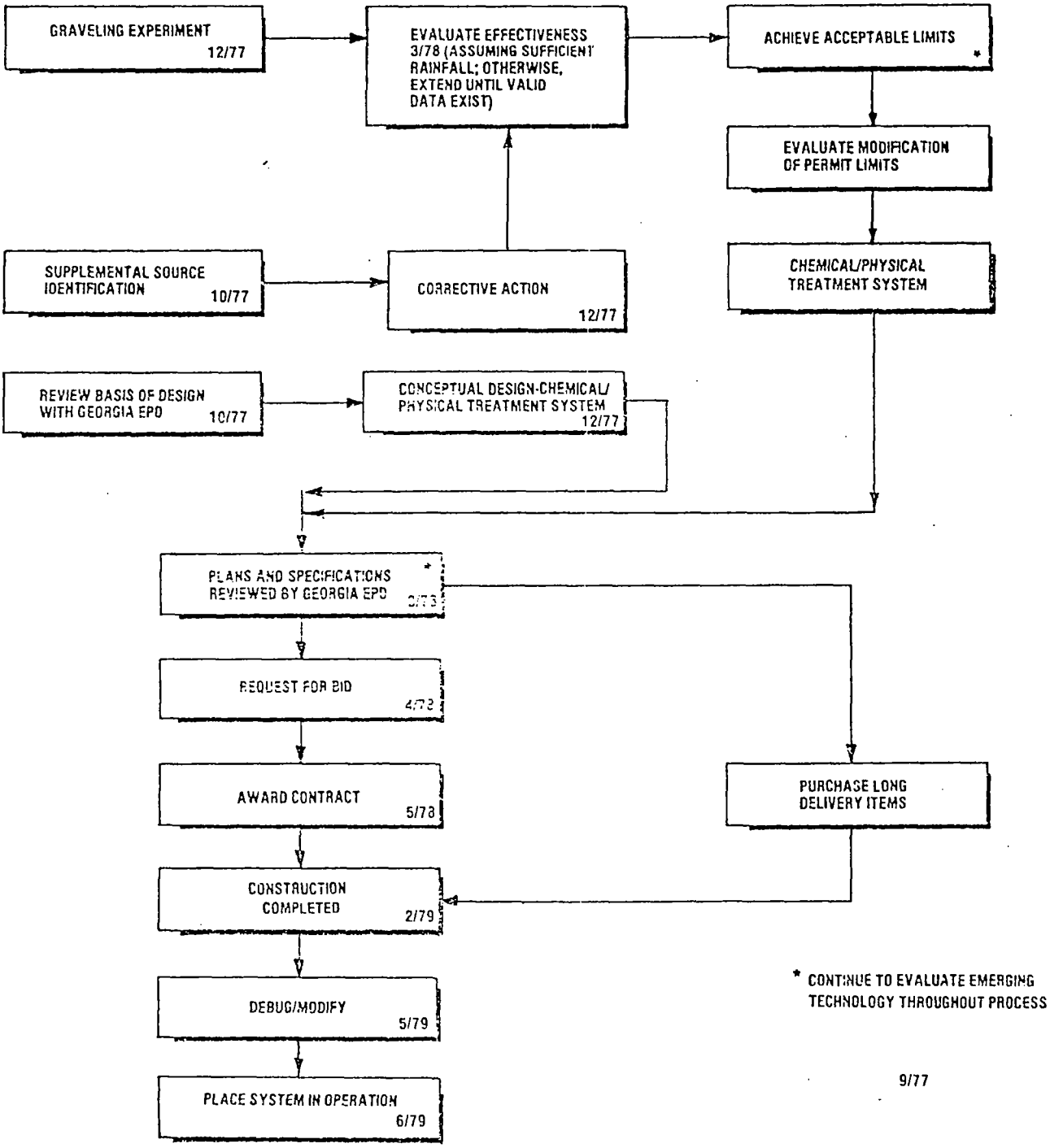
DISCHARGE POINT

002

ITEM DESCRIPTION	DATE
I. Termination of Pyranol usage - this action reduced the potential for losses at each discharge point, but was particularly important at 002. The major source of discharge resulted from employee tracking from manufacturing areas to the parking lot. Storm drainage flowing to 002 passes over the parking lot and heavily traveled sidewalks between these two areas.	4/77
II. Eliminate process flow - analytical results indicate that PCB concentration during storm runoff is $<$10 ppb. By eliminating process flow, acceptable PCB limitations will be achieved.	5/77
III. Removal of wood block flooring will eliminate the potential for future losses due to employee tracking.	8/77

EXHIBIT 3

DISCHARGE POINT 003
COMPLIANCE FLOW DIAGRAM



* CONTINUE TO EVALUATE EMERGING TECHNOLOGY THROUGHOUT PROCESS

9/77

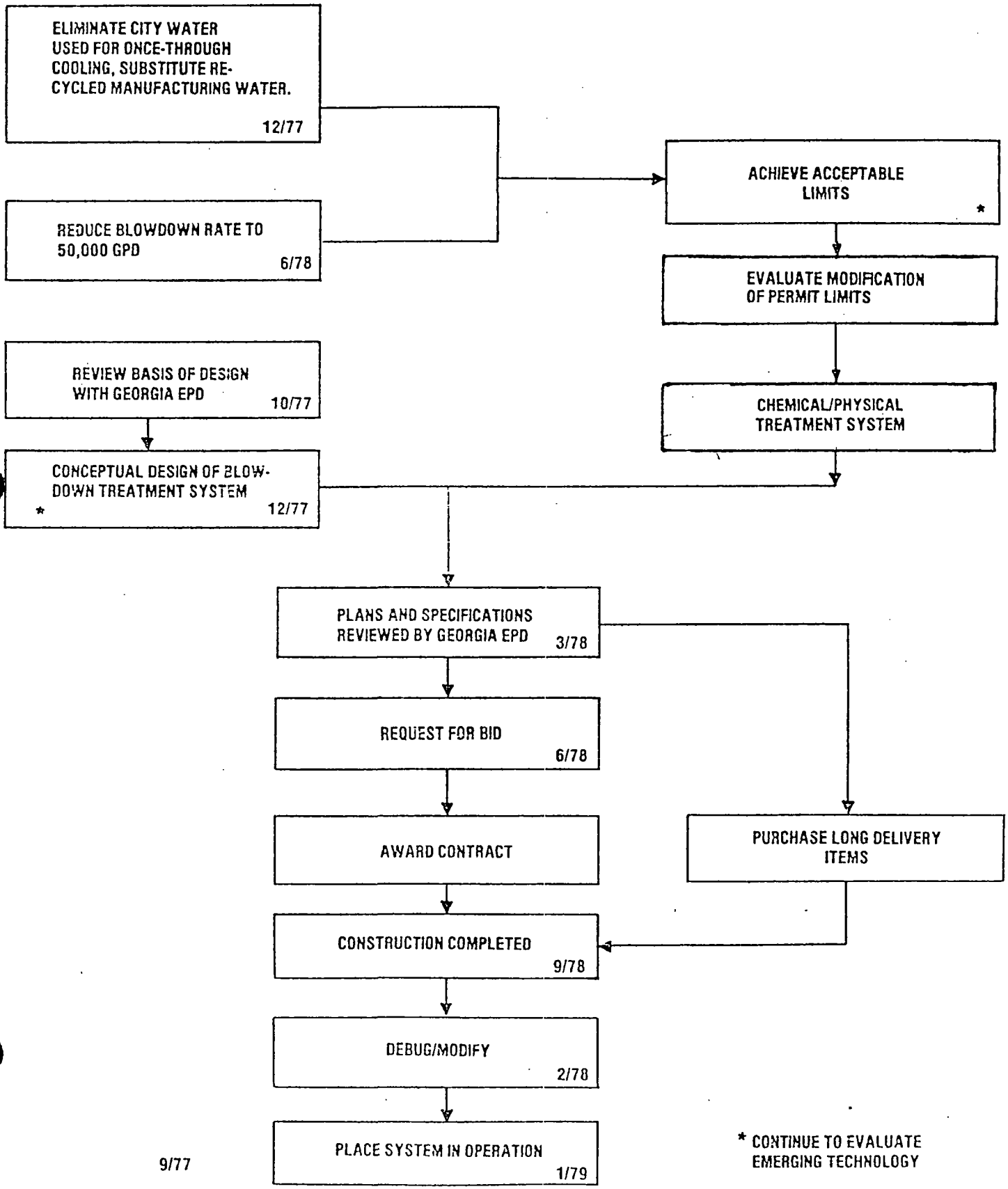
DISCHARGE POINT

003

ITEM DESCRIPTION	DATE
I. Graveling Experiment: cover primary drainage area leading to 003 in same manner as 001. This installation will require construction of more curbing and 4" concrete on grade to achieve $\leq$ 1% slope for gravel layers.	12/77
A. Evaluate effectiveness - as rainfall permits, samples will be collected and analytical results plotted to determine trend.	
• Initial indication of effectiveness	9/77
• Examine trend	12/77
• Complete statistical analysis (assuming adequate rainfall)	3/31/78
II. Source identification: samples will be collected to locate current PCB contributors (soil, concrete surfaces, pipe containing residuals).	10/77
• Implement corrective action	12/77
III. Chemical/Physical Treatment System	
• Review basis of design with Georgia EPD	10/77
• Conceptual design completed	12/31/77
• Plans and specifications reviewed by Georgia EPD	3/78
• Request for bids	4/78
• Award contract	5/78
• Complete construction	2/79
• Debug and modify	5/79
• Place system in operation	6/79

DISCHARGE POINT 004
COMPLIANCE FLOW DIAGRAM

EXHIBIT 4



9/77

* CONTINUE TO EVALUATE EMERGING TECHNOLOGY

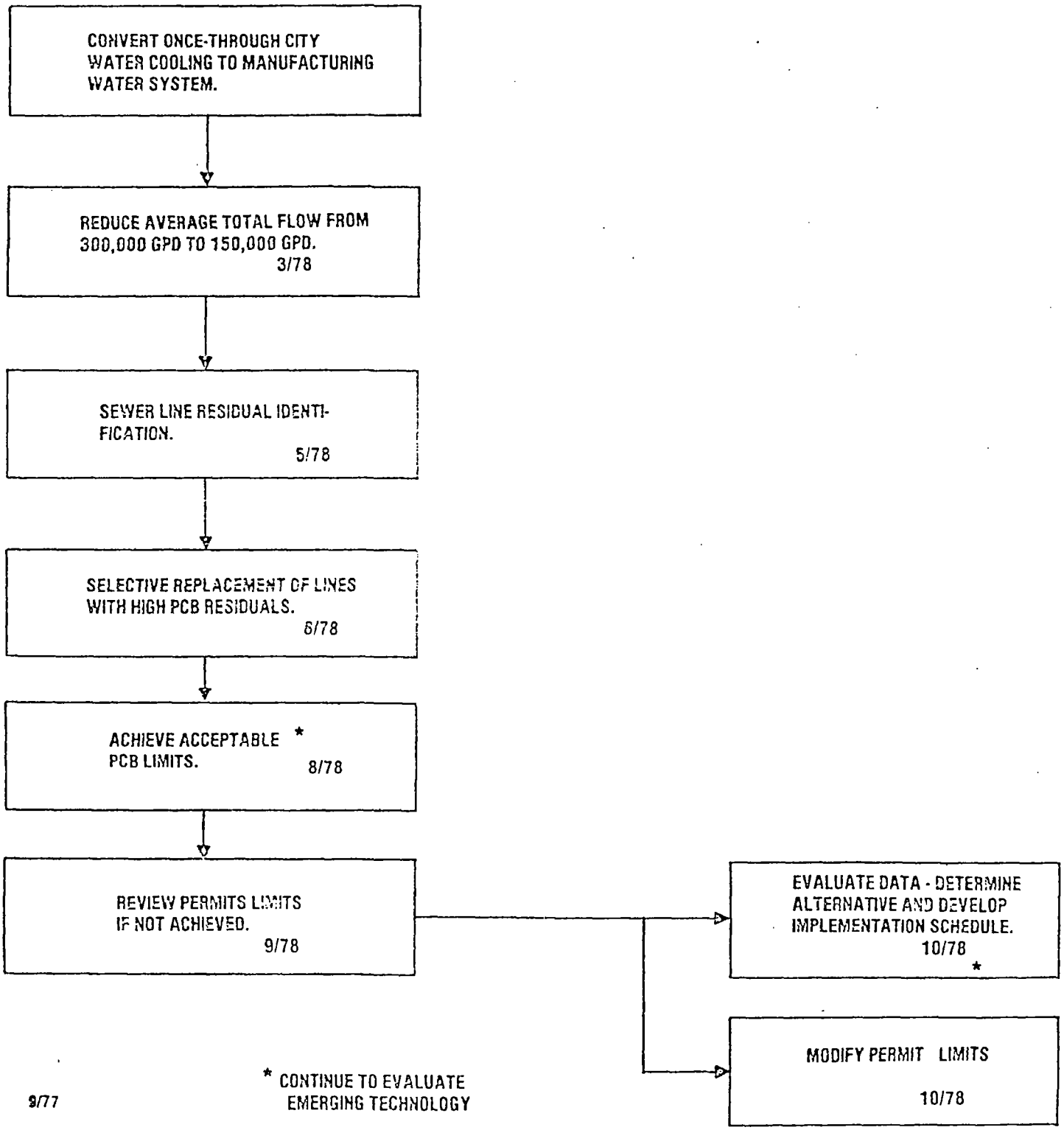
DISCHARGE POINT

004

ITEM DESCRIPTION	DATE
I. Eliminate city water used as once through cooling. Substitute manufacturing water which is recycled to spray pond.	12/77
II. Reduce spray pond blowdown to 50,000 gpd by increasing cycles of concentration. Corrosion inhibiting chemicals as well as a dependable biocide will be added to enhance system operation.	6/78
III. Blowdown treatment system	
• Review basis of design with Georgia EPD	10/77
• Conceptual design completed	12/77
• Plans and specifications reviewed by Georgia EPD	3/78
• Request for bid	6/78
• Award contract	7/78
• Construction completed	9/78
• Debug and modify	12/78
• Place system in operation	1/79

EXHIBIT 5

DISCHARGE POINT 005
COMPLIANCE FLOW DIAGRAM



9/77

* CONTINUE TO EVALUATE EMERGING TECHNOLOGY

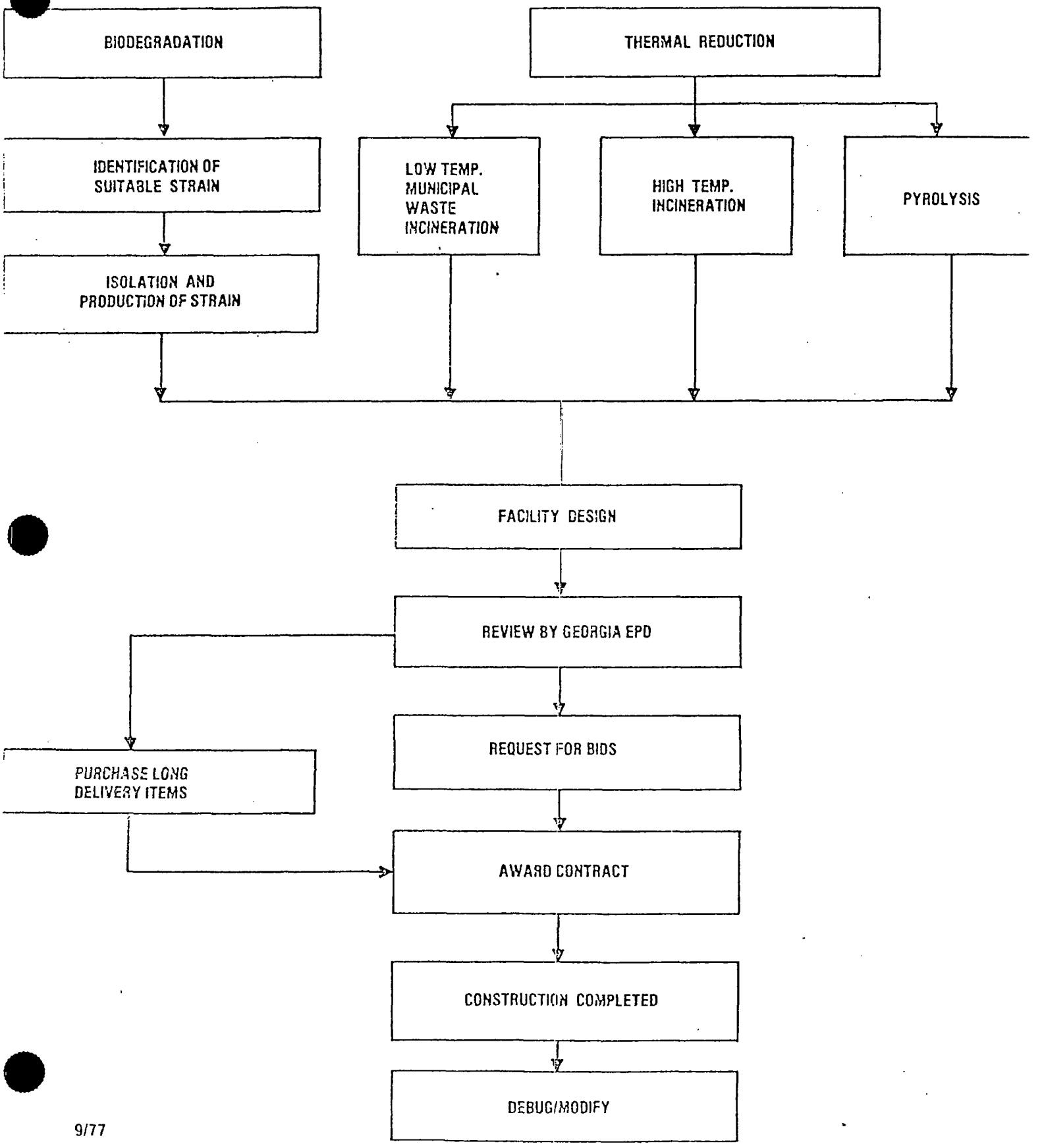
DISCHARGE POINT

005

ITEM DESCRIPTION	DATE
I. Water conservation - once through city water cooling will be eliminated and associated drain lines will be removed from sanitary. Manufacturing water will be substituted to provide cooling requirements. A limited amount of manufacturing water flows to sanitary. These sources will be returned to the spray pond. The remaining flow will consist of restrooms, sheet metal wash line, contact cooling water (quench tanks), metal cleaning and leak test operations, air conditioner condensate and similar sources. All contributing sources will be reviewed and reduced as far as practical. The average total goal for sanitary flow is 150,000 gpd.	12/77
II. Selective replacement of sewer lines - sewer line along south side of Building 3 contains slightly higher residual levels than remainder of system. Line would be replaced with lift stations and a new gravity line positioned above existing line. As an alternate, a sewer liner will be evaluated.	7/78
III. Determination of other alternatives - if the foregoing actions do not achieve permit limits, the limits will be reviewed with Georgia EPD. There will be a choice: modify permit limits to a level that can be achieved or after careful evaluation of all the data available, a determination of other practical alternatives will be made, including consideration of on-site, end-of-line treatment.	

EXHIBIT 6

SLUDGE DISPOSAL



9/77

SLUDGE DISPOSAL

ITEM DESCRIPTION

I. Ultimate disposal of sludge produced from end-of-line treatment is a difficult problem. General Electric has begun research to evaluate methods of PCB destruction in solids.

Biodegradation is the most attractive alternate because of low-cost and low-energy requirements. Bacteria strains capable of converting PCBs are being sought and tested.

Thermal reduction is being evaluated from several sources. Systems under review include high temperature incineration, standard solid waste incineration and pyrolysis. The selection of an appropriate system is dependent on technology being developed. Therefore, progress dates cannot be established. The sequence of events would be similar to previous action plans and is shown below. Prior to completion of a disposal facility, the Company shall take whatever measures are necessary to prevent sludges resulting from any treatment facilities constructed at the Company's Rome Plant from contaminating the waters of the State.

- Design
- Review by Georgia EPD
- Request for bid
- Award contract
- Complete construction
- Debug/modify
- Place system in operation